



Mississippi River Research Consortium  
35th Annual Meeting Program  
Radisson Hotel, La Crosse, Wisconsin

SCHEDULE OF EVENTS AND LOCATIONS

**24 APRIL 2003 – THURSDAY**

7:15 AM	Registration (Ballroom Foyer)
8:00 AM	Platform Presentations Sessions I and II (Ballroom A)
NOON	Lunch (On your own)
1:00 PM	Platform Presentations Sessions III and IV (Ballroom A)
5:00 PM	Poster Presentations and Social (Ballroom Foyer)
6:00 PM	Banquet (Ballroom B)

**25 APRIL 2003 – FRIDAY**

7:45 AM	Registration (Ballroom Foyer)
8:00 AM	Platform Presentation Sessions V and VI (Ballroom A)
11:40 AM	Middle & High School Student Poster (Ballroom Foyer)
NOON	Business Meeting (Ballroom A)
1:00 PM	Lunch and Raffle (Ballroom B)

**24 APRIL 2003 – THURSDAY**

**PLATFORM PRESENTATIONS  
BALLROOM A**

8:00 AM Welcome and Announcements, Jeff Arnold, MRRC President

**SESSION I – WATER QUALITY AND HYDROLOGY (Moderator: John Chick)**

8:10 AM A SATELLITE-BASED ASSESSMENT OF THE 2001 FLOOD EVENT FOR LA CROSSE, WI. **Cynthia J. Berlin.**

8:30 AM MATHEMATICAL MODELING FOR ARTIFICIAL ISLAND CONSTRUCTION WITHIN THE LOWER PEORIA LAKE. **Nani G. Bhowmik.**

8:50 AM TWELVE YEARS OF WATER QUALITY TRENDS IN POOL 26 OF THE UPPER MISSISSIPPI RIVER. **Lori Soeken-Gittinger** and John H. Chick.

**SESSION II – VEGETATION (Moderator: John Chick)**

9:10 AM DETECTING AND PROTECTING WILD RICE (ZIZANIA AQUATICA L.) IN THE UPPER MISSISSIPPI SYSTEM (UMRS) --1975-2001. **J. Therese Dukerschein.**

9:30 AM AQUATIC PLANT GROWTH MODEL REFINEMENT FOR THE UPPER MISSISSIPPI RIVER-ILLINOIS WATERWAY SYSTEM NAVIGATION STUDY. **Elly P.H.Best**, Gregory A. Kiker, Beth A. Ryczyn, Kevin Kenow, Jim Fischer, Shyam K. Nair, and Dan B. Wilcox.

**9:50 – 10:10 AM BREAK**

**SESSION II – VEGETATION cont. (Moderator: Sean Jenkins)**

10:10 AM SUBMERSED AQUATIC VEGETATION [WILDCELERY (VALLISNERIA AMERICANA) AND SAGO PONDWEED (POTAMAGETON PECTINATUS)] RE-ESTABLISHMENT EFFORTS IN LAKE CHAUTAUQUA, ILLINOIS RIVER. **Thad R. Cook** and Mark A. Pegg.

10:30 AM SPATIAL AND TEMPORAL DYNAMICS BETWEEN OVERSTORY STRUCTURE AND GROUND FLORA DIVERSITY OF TWO LIMESTONE GLADES IN PIKE COUNTY, ILLINOIS. **Michael J. C. Murphy** and Sean E. Jenkins.

10:50 AM PREDICTING SEED/SEEDLING DYNAMICS: THE NON-TAROT CARD APPROACH. **Robert Cosgriff**, Yao Yin, Theresa Blackburn, Thad Cook, Heidi Langrehr, and Megan Moore.

11:10 AM PHYSICAL AND CHEMICAL INFLUENCES ON THE DISTRIBUTION AND ABUNDANCE OF VALLISNERIA AMERICANA L. **Rebecca M. Kreiling**, Yao Yin, Daniel T. Gerber, and Abdulaziz Elfessi.

11:30 AM FOREST COMMUNITIES OF A HYDROLOGICALLY MODIFIED FLOODPLAIN ALONG THE LOWER KASKASKIA RIVER. **Susan P. Romano**, James J. Zaczek, Sara G. Baer, and Karl W. J. Williard.

**11:50 AM LUNCH (On your own)**

### SESSION III – BIRDS (Moderator: Megan Moore)

- 1:00 PM BALD EAGLE NEST SITE SELECTION AND PRODUCTIVITY RELATED TO HABITAT FEATUTURES. **Jeremy E. Guinn** and James W. Grier.
- 1:20 PM REPRODUCTIVE SUCCESS AND TERRITORY RE-OCCUPATION RATES FOR RED-SHOULDERED HAWK (BUTEO LINEATUS) WITHIN THE MILAN BOTTOMS. **Jon W. Stravers**, Kelly J. McKay, and Gary Swenson.
- 1:40 PM BREEDING BIRDS OF YOUNG FLOODPLAIN FORESTS GROWING ON ABANDONED AGRICULTURAL LAND. **Melinda G. Knutson**, and Laura E. McColl.
- 2:00 PM SPATIALLY-EXPLICIT HIERARCHICAL MODELS OF ANIMAL COUNTS. **Wayne E. Thogmartin**, Melinda G. Knutson, and John R. Sauer.
- 2:20 PM GENE FLOW IN THE ILLINOIS POPULATION OF WILD TURKEY, AN INVESTIGATION USING MTDNA. **Jessica L. Petersen** and Michael A. Romano.

**2:40 – 3:00 PM BREAK**

### SESSION IV – NATIVE BIVALVES (Moderator: Mark Pegg)

- 3:00 PM SIMPLE STOCHASTIC MODELS TO EXPLAIN POPULATIONS OF THE FINGERNAIL CLAM, MUSCULIUM TRANSVERSUM. **Jim Eckblad**.
- 3:20 PM HABITAT SUITABILITY ANALYSIS FOR MUSSELS IN THE MISSISSIPPI RIVER. Yenory Morales, **Larry J. Weber**, and Arthur Mynett.
- 3:40 PM WHY IS THE MUSSEL FAUNA DIFFERENT AROUND THE CORNER FROM THE ST. CROIX? RECOVERY OF THE UNIONID FAUNA IN MISSISSIPPI RIVER MARGINAL HABITAT, LOWER POOL 2, MINNESOTA. **Marian E. Havlik**.
- 4:00 PM THREE-DIMENSIONAL HYDRODYNAMIC SIMULATIONS OF THE MISSISSIPPI RIVER – POOL 16. **Andrew McCoy**, Larry Weber, Yong G. Lai, and Tatsuaki Nakato.
- 4:20 PM HYDRODYNAMIC CHARACTERIZATION OF FRESHWATER MUSSEL HABITATS IN THE UPPER MISSISSIPPI RIVER. **Nathan Young**, Larry Weber, and Tatsuaki Nakato.

**PLATFORM PRESENTATIONS  
BALLROOM A**

**SESSION V – FISH (Moderator: Brent Knights)**

- 8:00 AM      SUSTAINED HIGH WATER ON THE MISSISSIPPI RIVER: INFUENCES ON FISH ASSEMBLAGES IN COLDWATER TRIBUTARIES. Neal D. Mundahl.
- 8:20 AM      CHANNEL CATFISH AS POTENTIAL SEED DISPERSAL AGENTS FOR RED MULBERRY AND SWAMP PRIVET IN THE MISSISSIPPI RIVER. John H. Chick, Robert J. Cosgriff, and Lori S. Gittinger.
- 8:40 AM      HIGHLIGHTS FROM 14 YEARS OF FISH MONITORING ON POOL 26 OF THE MISSISSIPPI RIVER. **Eric N. Ratcliff**, Eric J Gittinger, and John H. Chick.
- 9:00 AM      COMPARING COMMERCIAL HARVEST AND LONG-TERM MONITORING TRENDS OF FISHES IN POOL 26 OF THE MISSISSIPPI RIVER. **Eric J. Gittinger**, Eric N. Ratcliff, John H. Chick and Rob J. Maher.
- 9:20 AM      EVALUATION OF A BARRIER TO PREVENT TRANSFERS OF HARMFUL AQUATIC SPECIES BETWEEN THE MISSISSIPPI AND GREAT LAKES BASINS. **Traci L. Barkley**, Richard E. Sparks, John M. Dettmers.
- 9:40 AM      EMP BIORESPONSE MONITORING SUMMARY: LAKE CHAUTAUQUA 1991-2002. **Kevin S. Irons**, T. Matt O'Hara, Michael A. McClelland, and Mark A. Pegg.

**10:00 – 10:20 AM      BREAK, MIDDLE & HIGH SCHOOL STUDENT POSTERS**

**SESSION V – FISH cont. (Moderator: Heidi A. Langrehr )**

- 10:20 AM      FISH RESPONSE TO EMERGENT VEGETATION PRODUCTION IN BACKWATERS OF MISSISSIPPI RIVER POOL 25: AN EVALUATION OF ENVIRONMENTAL POOL MANAGEMENT. **S. Reid Adams**, James E. Garvey, Michael B. Flinn, Brooks M. Burr, Matt R. Whiles, and Robert J. Sheehan.

**SESSION VI – AQUATIC INVERTEBRATES (Moderator: Heidi A. Langrehr)**

- 10:40 AM      AQUATIC MACROINVERTEBRATE RESPONSES TO ENVIRONMENTAL POOL MANAGEMENT AND EMERGENT VEGETATION IN BACKWATERS OF MISSISSIPPI RIVER POOL 25. **Michael B. Flinn**, Matt R. Whiles, S. Reid Adams.

- 11:00 AM INTERACTIONS BETWEEN THE HYDROID CORDYLOPHORA SP. AND THE ZEBRA MUSSEL DREISSENA POLYMORPHA IN TWO MIDWEST RIVERS. **Emily Thorn, Laura Page**, Nadine C. Folino-Rorem, Jim Stoeckel, Chris Flinn
- 11:20 AM SPATIAL AND TEMPORAL DIFFERENCES IN TRANSPORT OF MACRO AND MICROZOOPLANKTON IN THE SCHOOLCRAFT LAKE-RIVER SYSTEM. **Debbie L. Gueda** and Erich Westrich.

**11:40 AM MIDDLE & HIGH SCHOOL STUDENT POSTERS**

**POSTER PRESENTATIONS  
HOTEL FOYER**

**24 APRIL 2003 - THURSDAY, 5:00 PM**

1. QUANTITATIVE SELECTION OF A SPECIES LIST FOR REVEGETATION OF REED CANARYGRASS COMMUNITIES. **Jessica A. Bolwahn**, Craig A. Annen, and Robin W. Tyser.
2. RAREFACTION ANALYSIS TO DETERMINE SUB-SAMPLING EFFORT FOR ESTIMATING CHIRONOMID DIVERSITY IN MINNESOTA FARM PONDS. **Benjamin D. Campbell**, Roger J. Haro, Melinda G. Knutson, and William B. Richardson.
3. NITROGEN CYCLING DURING SEDIMENT DESICCATION AND REWETTING IN THE UPPER MISSISSIPPI RIVER, NAVIGATION POOL 8. **Jennifer C. Cavanaugh**, Eric A. Strauss, Lynn A. Bartsch, William B. Richardson, and Dave M. Soballe.
4. LONG TERM WATER TEMPERATURE MONITORING ON THE ST. CROIX NATIONAL SCENIC RIVERWAY. **Randy Ferrin** and Byron Karns.
5. EFFECTS OF ZEBRA MUSSEL INFESTATION ON GENETIC DIVERSITY OF NATIVE MUSSEL SPECIES. **Jason E. Granberg**, Michael A. Romano, Richard V. Anderson.
6. RELATIONSHIPS BETWEEN FISH COMMUNITIES, HABITAT TYPES, AND ENVIRONMENTAL GRADIENTS IN THE UNIMPOUNDED MISSISSIPPI RIVER. V.A. Barko, M.W. Palmer, D.P. Herzog, and **R.A. Hrabik**.
7. A COMPARISON OF MACROINVERTEBRATES AS FACTORS IN DETERMINING BIOLOGICAL INTEGRITY: AN INDEX OF WATER QUALITY FOR MULTIPLE STREAMS. **Byron Karns**, Marcey Westrick, Leonard Ferrington.
8. VEGETATION RESPONSE TO A DEMONSTRATION DRAWDOWN ON POOL 8 OF THE UPPER MISSISSIPPI RIVER. **Kevin P. Kenow**, James E. Lyon, Randy K. Hines, and Larry R. Robinson.

9. TUNDRA SWAN RESEARCH NEEDS ON THE UPPER MISSISSIPPI RIVER. **Kevin P. Kenow**, James M. Nissen, Robert Drieslein, Erik M. Thorson.
10. COMMUNICATING SCIENTIFIC RESULTS USING MULTIMEDIA VIDEOS. **Andrew J. Kimball**, Shawn E. Weick, and Melinda G. Knutson.
11. CHANGES IN AQUATIC VEGETATION BETWEEN 1975, 1991, AND 2002 IN POOL 8, UPPER MISSISSIPPI RIVER. **Heidi A. Langrehr**.
12. FACTORS INFLUENCING SPATIAL VARIATION IN NITROGEN FIXATION. **Carolyn M. Lipke**, Lynn A. Bartsch, Eric A. Strauss, William B. Richardson and Jennifer C. Cavanaugh.
13. EFFECTS OF REED CANARY GRASS (*Phalaris arundinacea*) ON TERRESTRIAL ARTHROPOD ABUNDANCE, BIOMASS, AND DIVERSITY IN UPPER MIDWESTERN RIPARIAN WET MEADOWS. **Melissa S. Meier**, Eileen M. Kirsch, and Robin Tyser.
14. BOOTSTRAPPING TO CREATE NON-PARAMETRIC CONFIDENCE INTERVALS FOR SELECTION RATIOS OF FEEDING SITES OF GREAT BLUE HERONS ON THE UPPER MISSISSIPPI RIVER SYSTEM. **Sarah Timm**, Christine Custer, Douglas Olsen.
15. A REGIONAL WETNESS INDEX MODEL, WITH APPLICATION TO MAPPING AVIAN HABITAT ASSOCIATIONS. Tim J. Fox, **Wayne E. Thogmartin**, and Melinda G. Knutson.
16. WEB-BASED APPLICATIONS SUPPORT BIRD CONSERVATION PLANNING. **Shawn E. Weick**, Timothy J. Fox, J.C. Nelson, John C. Sauer, Wayne E. Thogmartin, Melinda G. Knutson.
17. HABITAT PREFERENCE AND GROWTH OF THE GLASS SHRIMP (*PALAEMONETES KADIAKENSIS*) IN THE UPPER MISSISSIPPI RIVER, DUBUQUE COUNTY, IOWA, AND VERNON COUNTY, WISCONSIN. **Amy Waterman**, Shelly Klein, Rebecca Rogis, and Daniel Call.
18. DECISION SUPPORT SYSTEM FOR AQUATIC RESOURCES IN THE MIDDLE MISSISSIPPI RIVER. **Steven J. Zigler**, Jason Rohweder, and Robert A. Hrabik.